At a wedding which is properly celebrated with all the attendant frills there are alcoholic beverages made from the pods of the algarrobo and vinal, and from forest honey -- regarding all of which I shall write in the following chapter. 273 [585]

Chapter VI

Fermented Beverages

Natural Products of Domestic Use

The algarrobo is to these parts what the chestnut tree is to Europe in its usefulness to the people who live in the region. By observation I have found that it grows in the area between one hundred and four hundred meters above sea level and between 30° and 15° of southern latitude, between the mountains and the sea. It does not like dampness, which keeps it from growing even in those places which would otherwise suit it. In dry, hot places I have come upon it even at an elevation of seven hundred meters above sea level, but always in flat country. 137

The algarrobo is found in various situations. Sometimes there are whole forests of this tree only; sometimes it grows in company with others. In my judgment it is the most widely distributed tree in the region and deserves, for this reason, and because of its great importance to have a whole area or forest zone named after it. It is to be found, in fact, growing both in forests rooted in earth built up out of the waters when these lands were raised, and in alluvial soil recently washed down.

The wood of the algarrobo is ideal for most construction purposes (except for roofing) and carpentry, but usually has the drawback of being short. There oozes from the trunk a black resin for which we have no use but the Indians do. The fruit is in the shape of a pod and contains a somewhat sweet flour which is used to make bread and fermented drinks. 137 824

There are in the region three types of algarrobo: the white kind which has pods in color and size similar to our white beans, from which a good beverage is made and the flour of which could be used. The black kind with pods like black eyed peas from which an inferior

drink is made; and the so-called [187] "patay" algarrobo whose pods, 137
like our white beans, are thick and produce a large amount of ex- 824
cellent flour with which bread -- called patay in the Quechua language --
is made. The first two have simple compound leaves, that is, each
leaf is made up of pairs of leaflets placed evenly along its axis, with
small thorns at the base of each leaf. The third type of algarrobo has
complex-compound leaves in which the secondary leaflets are sub-
divided into many pairs of almost microspoic ones, as occurs in the
churqui (Acacia cavenia), and also has thorns between ten and fifteen
centimeters long, though not large in girth.

In order to make patay (bread) which is only made in Santiago 252
and Catamarca in the basin of the Pueblos de Belen, the dry algarrobo
pod, ready for grinding, is placed under a hardwood or stone pestle
which is moved by a long lever. The pod, thus ground, is turned
into flour, but the seeds, which are extraordinarily hard, do not even
break. The flour is then sifted, poured and pressed into a pot which
has been previously heated by being put out in the sun or near a fire.
The pot is now sealed off with fine sand and then again placed in the
sun or near a fire for a short while. In ten minutes the patay is ready,
for the warming has no other object than to melt the honey contained
in the flour in order to make it coalesce into a lump, this lump be-
coming very hard once the honey cools. Thus they make loaves
weighing from four to six pounds and more, which can be packed
into saddlebags, slung over the saddle and afford a delicious if some-
what cloying food. The flour is in some ways similar to chestnut
flour. A slice of this, impaled on a knife and heated in the fire is
a really superb tidbit, both in smell and in taste. Aloja is the 273
Argentine (1) name given to the fermented beverages of that region,

1. Cacan (?) Ed.

while in Quechua they are called chicha (2), in Mataco; hŭ-nă;

2. Chicha is made from corn. Ed. --
See: Acca and Asua. [?--Translabor]

in Mocovi: nă-nă and nănn-nă; and in Vilela: tsŭc-cuĕ.

In order to make this beverage, in Perū as well as among the savage Indians, the usual thing is to chew a part of the raw-material which is then mixed in with the rest. This smaller chewed portion acts as a leavening since saliva, as we know, contains diastase, found also in the cotyledons of seeds, which converts starches into glucose or grape sugar and so makes them soluble in water and fermentable, thus producing alcohol. The Indian knows nothing about all this but being as he is a keen observer he has discovered the effect of this chewing operation, so nauseous to the whites who see it practiced.

This same process was used in China in the making of [188] bread and in the East Indies in the preparation of fermented beverages. In our own midst, who is unaware of the custom indulged in by nurses and mothers of chewing the baby's food before giving it a spoonful of it? In spite of the lack of knowledge on the part of those who do this and of its foolishness and repulsiveness in the eyes of those who see it done, this custom has a very useful end, and science puts its seal upon it.

One often sees wooden and earthenware receptacles in the Indian dwellings into which people spit the pods which they have chewed during the day. In addition to this women and children, at certain hours, set to and break and chew pods, and the small children have a great time grabbing handfuls of pods in their fat little hands, cramming them into their mouths and spitting them over and over again into the pots. Often the grownups also gather there and then the preparation of aloja is an occasion for fun. The unchewed portion is ground in a mortar, which is always made of yuchan, a tree about which I shall make some comment later. The whole lot is then passed into a mortar made of a single trunk of that same tree and water is mixed into it immediately in quantity enough to make two or three barrels of aloja at a time.

Twelve hours later the aloja is ready. It has a bitter-sweet taste and is yellowish in color. Its sharp tang makes it pleasant to the palate. I prefer it in the Chaco to any other drink, including wine itself. Taken in quantity it inebriates, but the drunkenness soon passes and leaves no hangover. At least that is the way in which I have seen it affect others.

The season for the ripening of the algarrobo pods coincides with 824 ● that of the vinal, which is not so good in quality but which can be used

in making aloja. The chañar ripens before the other two mentioned above and is a sweetish, round, rather small yellow fruit with a stone, which is eaten either raw or cooked. From this fruit arrope is made, which is good tasting and has, in local opinion, medicinal qualities for the treatment of coughs and asthma. The chañar tree, while it is young, has leaves and trunk similar to the tamarind; the branches look like those of the eucalyptus. 824

Shortly after the algarrobo pods comes the mistol which is similar to our azufaifo except for this difference: from a mixture of its fruits with algarrobo pod flower, patay is made, and kept in skins and well kneaded. Together with these fruits, sometimes a little earlier, sometimes a little later, all the other fruits ripen -- in the Chaco in the hottest months which are October and December (spring and summer months) and further south, towards Tucumán, in November and February.

Through certain techniques of preservation the Indians are able to prolong the yearly period during which they can feed on this vegetable diet, particularly if the crop has been a good one. The harvest lasts between four and five months and is a time of carnival for the Indians [189]. 251

To preserve the algarrobo pods they build small huts which they place on four posts in order to supply them with proper ventilation and to keep them free of ants and other insects. It is a pleasure to see these little constructions rising above the Indians' huts in the same manner as do our towers. Each camp takes pleasure in having more of these little granaries than do its neighbors. In the same manner do they keep vinal and some roots and fruits which can and should be cooked when dry. 343

When the aloja is ready, which is usually at eleven in the morning, all the men gather about the yuchan container, seated in the Moorish fashion. Then, with two or three long-handled dry gourds they dip out the liquid and pass it around to each other. Meanwhile they talk about their affairs: about wars, the crops, news, odd bits of scandal, and guffaw at any strange happening or quid pro quo. Thus they continue for three, four or more hours. When the liquor is finished they fall upon the solid matter remaining. The women and children take no part in any of this. 273 [521]

They set a high value on the algarrobo pod. A famous chief, whom the whites called Granadero (Grenadier guard -- Translator) 824

because he was so tall, and the Matacos called Quiatzutaj, which means Vilelón (large Vilela Indian--Translator), because of his national origin and size, when I asked him how things were going with him replied: "Well...I...I rich...I having...much... algarrobo pods...I rich." They are miserly with these pods and with aloja, to the extent that they will not barter them except on very rare occasions. Only in a niggardly way and half heartedly will they invite anyone to share their aloja. 824 ● [556]

One morning I came upon a group of some forty Indians who were sitting around a yuchan of aloja. When I made my appearance and as soon as they recognized me they all began to shout: "John, John...yúc-cu-ás...yúc-cu-ás" (tobacco, tobacco), and I answered "hué-ni-tdé: niquiolá pac" (I have none, later I shall give you some). Only then did they invite me to drink with them and at my first refusal did not insist a second time, the chief saying to me -- "No my child...no...we...taking...you giving...tobacco." This was by way of politeness, in the Indian manner to be sure, but politeness nonetheless. I, to please them, made some effort to speak a few words to them in their own language and finally took my leave saying: "Amecná, nu yopil nuháuet...nutpinlá pac...niquioc-la yuc-cu-as..." (Goodbye, I am going home...I shall come back right away...I shall give tobacco). And all of them, full of pleasure because I spoke to them in their language and promised them tobacco shouted: "Amecná... amecná...tapil...ccaelitt (Goodbye, goodbye, come back soon). I returned after two or three hours with my pockets bursting with cut tobacco [190] and found all of them still drinking. As soon as they saw me they reminded me of my promise, which I thought they might have forgotten amidst the fumes of drunkenness. I distributed it to them and even when it was all gone they kept on asking me for more, upon which I turned my pockets inside out and shouted to them "namhuen, namhuen" (I have no more). They, satisfied with the eloquence of my demonstration, gave up their clamoring saying hée hée, which means "well, well"; but they forgot to offer me another drink of aloja. 123 574

While on the subject of greetings: these Indians have the custom of tapping the chest of their guests lightly and amicably with their half-closed fist, accompanying these caresses with expressions of good fellowship such as hée, hée, etc. -- (Good, good! etc.). 576

During the aloja revels squabbles, fights and killings are frequent, and this not only among the Indians but among the Chaco whites also. 578

A couple of words now about the yuchan, also called palo borracho (drunken tree--Translator). It is a bombaceous tree whose scientific name is Chorisia insignis, and might well be called the cotton tree. It has a strange shape which justifies its vernacular name. The trunk is shaped like an oil jar, that is, narrow at its base, wide in the middle and narrow once more at the point where the crown forks. The trunk grows to a diameter of two meters and is covered with spiked bumps. At most it reaches a height of four or five meters and is often accompanied by a shoot growing at its base. The crown is at first made up of only two branches which later subdivide and form a wide crown of some eight, ten or more meters in diameter. The leaves are similar to those of the walnut but a little smaller and provide good shade. 137

From the bark, strips are cut which are used for tying bundles, as roofing material, to wrap and tie bunches of tobacco leaves and for any similar use. The Indians make their canoes from the trunk, all of a piece. In order to do this all they do is hollow it out with any old tool, since the wood is soft and easily worked when newly cut but later becomes harder than cork although spongy like it when dry. The Matacos use the name cuóu quiác for canoe, which in their tongue means "duck." 824● [283] [396]

But the thing which is especially interesting about the yuchan is its fruit, which in size and shape is like a lemon. When it is ripe, which usually occurs between November and January, according to its location, the lemons split into four lobes and there appears a plume-like puff of cotton, white as snow, which little by little is carried away by the wind. 137

One of these open lemons is about the size of a fist, and each tree produces hundreds of them each year.

The Indians make a limited use of this cotton, but the whites do not, although I have seen in Catamarca, where the number of these trees is small, white cloth made from this material which won prizes at the Córdoba exhibition.

In the Chaco there is an immense number of yuchans which grow mixed in with other hard-wood trees. If this cotton could be

dye themselves red when they are courting, black when they wish 302
to appear dreadful, and green when celebrating some festivity.
These colors come off very easily.

While on the subject of personal adornment, I must say that 304
these Indians, to a greater or lesser degree, are in the habit of 824
tattooing themselves. I have seen this carried to great lengths
among some Toba warriors, and especially among the women. It
looks something like the scars left by smallpox and is set out in
geometric designs. They do it by puncturing the skin with a [216]
large thorn coated with a caustic substance which looks like milk
and which leaves an indelible mark and remains under the
epidermis. This substance is to be found mainly in Bolivia in the
region of Santa Cruz, and is called in Guarani iguoqui. The same
name is given to the plant from which it comes which is a vine
which produces bunches of white flowers and elongated fruit
which break open and expel a sort of dust. In order to obtain
iguoqui they cut the bunches before they ripen, and from the stalk
there exudes the milky sap used for tattooing. While the opera-
tion is in process they keep the portion of stalk submerged in water
so that its milky contents will not well out and be lost. A Chiri-
guano Indian saw one of these vines twenty leagues downstream
from the frontier with the whites on the Bermejo River in the
place called La Luna Nueva.

A custom very similar in nature to tattooing in its object 302
is the plucking of hair which is a universal activity among the
inhabitants of the Chaco and possibly among all the Indians of the
New World.

The object of this is to appear better looking, but it is
possible that the real cause has something to do with hygiene
and comfort.

Maybe they want to set themselves off in this way from the
other animals, which are covered with hair.

Meanwhile, either because they are naturally so or because
of a gradual natural selection based on their depilatory habit, [142]
the fact is that the Indians are almost completely lacking in hair
both on the body and face, and the little which does grow they
pull out, with very few exceptions.

In spite of their language's being so complete I have been 533
unable to discover canticles or any similar musical effort. All

2: Karsten E-5 (1911-1913)1932 SI7 Mataco SI7

Chapter XIII.

Belief in „good spirits".

776 I have so far mainly spoken of such spirits of the Chaco Indians as are regarded as essentially evilly disposed to mankind, being looked upon as the authors of sickness and misfortune. But the religion of these Indians is by no means only a pure demonology. They also assume the existence of »good spirits« and these from a certain point of view are of the greatest interest. The Chaco Indians especially speak of their good spirits with reference to the guardian spirits of the medicine-men and the spirits animating certain plants. With the former I shall deal presently. For the moment a few words may be said of the spirits which are 776 believed to animate the *plants*. Of course, there are also evil or harmful plant spirits. The character of the spirit animating a tree or plant is ● 824 naturally first of all determined according to the useful or harmful properties of that tree or plant. Thus plants producing poisonous fruits harmful to man, are animated by evil spirits, since the effects are always ascribed to the indwelling spirit, the »soul« of the plant. Likewise, in [754] the cactus thorns, of which malignant sorcerers avail themselves in throwing spells, are animated by evil *möhsek*, *aittáh*, *peyák*, according to the names different tribes give these demons. Still the Chaco Indians pay special attention to the spirits of such trees or plants as produce edible or otherwise useful fruit, which in a country like Chaco are of essential importance to the inhabitants.

776 Among trees which from an alimental point of view are of great import-
824 ance to the Chaco Indians I have mentioned the algaroba, the chañar,
262 and the tusca, the fruits of which ripen in the months October to February. It is particularly these trees which are said to be animated by »good spirits« who control their growth and cause their fruits to ripen.

2: Karsten E-5 (1911-1913)1932 SI7 Mataco SI7

The Tobas call the spirit *peyák noín* or *nõtta*,[1]) the Mataco *aitták slahsa is*, the Choroti *möhsek eis*, and the Ashluslay *sitché is*. The spirit is thus identical with the vital power or the principle of life in the plants, just as the spirit or spiritual power which animates man is the principle of life and growth in the human body. The same belief is held of cultivated plants such as the pumpkin, maize, manioc, and the water melon. Of these the Tobas at any rate appreciate the water melon most, because from this fruit, just as from the fruits of the wild plants, they brew an intoxicating drink of mysterious power.

The most important of the forest trees is the algaroba, the value of which from an alimental point of view has already been mentioned. The algaroba season begins in November and lasts until the end of January, and is therefore impatiently awaited by the natives, and they try to »hurry on» its coming by various magical means. The Mataco and the Choroti, for instance, are in the habit of beating the drum every night for about one month previous to the commencement of the »season», in order, as they say, to expel the evil demons who prevent the fruit from reaching maturity, but also with a view to directly influencing the spirit (*aitták* or *möhsek*) which is believed to animate the tree. During the »season» the drum — at any rate among the Choroti — is beaten even in the day-time. Thus, it is believed, the trees will be influenced to continue producing fruit in abundance. The Tobas again, perform a special dance with the same object, beginning some time before the fruit ripens and continuing this ceremonial dance during the whole algaroba season.

But the Chaco Indians not only appreciate the algaroba and other fruits as *food*, but above all because of the *intoxicating drinks* they prepare from them. We should know little of the religion of these Indians if we did not know the religious ideas associated with these sacred drinks and the drinking-feasts, which in the summer months form perhaps the most salient feature of their social life.

The magical power which is commonly ascribed to intoxicating drinks is, according to Indian belief, due to the very spirit which animates the plant and is specially present in its fruit. The plant spirit reaches its highest point of actuality and concentration when the drink brewed from its fruit has fermented, for fermentation is to the Indian

[1]) *Nõtta* (= *noin'ta*) is a comparative form of the word *nóin*, 'good', but is generally used by the Bolivian Tobas in a positive sense. The Argentine Tobas, on the other hand, more commonly use the word *noin*.

3: Metraux E-5 (1933) 1939 SI7 Mataco SI7

18. The Star-woman (second version) (Martin)

There was a man who was very ugly. Nobody liked him. One night he stood where the others were playing. Looking upward he saw in the sky a pretty red star. He said, »I would like to marry her.» As soon as he had made this wish the star stood near him. The woman said, »I came because you called me.» He told her that he loved her. They were married. But after a few days they quarreled. The woman went back to the sky and the man followed her. The Morning Star is an old man who has a big fire. His fire is cold. The star-woman was the daughter of the Morning Star. In the sky it is very cold. The father of the star-woman burned his son-in-law and ate him. His soul entered an owl called *tyustáx* which says »wek, wek, wek.»

C. THE TRICKSTER

19. Origin of the Corn

Tawkxwax sowed only one gourd in his field. The armadillo went to him and asked for a seed, but *Tawkxwax* refused to give it. The armadillo then cut off the end of his own tail, which was covered with granulous scales, and stuck it in the soil. Beautiful corn stalks soon sprouted from the ground. At that time the armadillo was the only one who had corn. *Tawkxwax* had gourds, melons, sorghum, sugar-cane, peanuts, oranges, bananas, but no corn. He called on the armadillo and begged for some grains of corn, but the armadillo refused because *Tawkxwax* had been stingy when he had wanted some gourd seeds. Besides he never gave anybody his new plants. *Tawkxwax* went for a walk to a forest. He got tired and sat down beside a *yuchan*[1] tree. He started to carve this tree into the shape of a horse. He changed the wood into a living animal. In the same way he made a saddle, reins and bridle. Then he set out on

[1] Bombaceae, silk cotton tree. The trunk has the form of a bottle; hence the popular name of the tree, *palo borracho* (drunk wood).

3: Metraux E-5 (1933) 1939 SI7 Mataco SI7

horseback. The people did not know what a horse was as they had never seen one. *Tawkxwax* was hungry so he went to the armadillo's house. There he succeeded in trading his horse for corn. With the corn in his possession, he called all the men together and distributed corn among them. He taught them how to cultivate it. The people at first were afraid. Many thought the plant was poisonous. Others said it was very good food. Finally all were convinced and from that day on people have always had something to eat. Mankind is indebted to *Tawkxwax* for food.

A man who heard of *Tawkxwax's* horse went to the forest in order to carve one for himself. He carved the *yuchan* so awkwardly that he made a tapir. Thus also did men make mules and donkeys.

20. Origin of Certain Wild Plants

Tawkxwax climbed a *yuchan* and fell down head first. As he fell the thorns of the tree tore his body. He removed his stomach from his body and buried it. From it grew a plant (*iletsáx*) the root of which is very large and full of water. His intestines became lianas. Like a cow *Tawkxwax* had two stomachs. With the second he made a plant called *iwokanó*.

21. The Origin of Serpents (Pedro)

In ancient times there were no serpents. One day *Tawkxwax* found a thick rope. He picked it up but threw it away later on. After a while, thinking it might be useful, he went back to get it. He looked and looked but he could not find the rope. At last he found a serpent and thought that perhaps it might be the rope he wanted. A serpent is therefore called *niyǫ́k* or rope. *Tawkxwax* wanted see whether this new animal he found could bite so he began to tease it. The serpent did not bite him. He held fire to the mouth of the serpent until it bit him severely. The first serpent he made poisonous was the *yarara* (*hatenekwę́mę*). When the other

X 539 X 773 825

serpents heard of this they went to *Tawkxwax* and wanted him to heat their mouths too. *Tawkxwax* heated the mouths of the *lančitąx, katitsul* (rattlesnake of the bush) and the coral *čalaxčetáx* The *aguara* (*iwalęk*) remained a very harmless serpent as he was afraid and ran away when *Tawkxwax* began to heat his mouth. The serpents which did not come to *Tawkxwax* to have their mouths heated are not dangerous at all (XI, p. 98).

22. Why There Are Poisonous Serpents (Pedro)

Formerly serpents were harmless and they would have remained so had it not been for *Tawkxwax*. He is a fool, a trickster. He got the silly idea of taking a live serpent and heating its mouth. From time to time he let it bite him in order to see the results of his burning. He would not stop until the fangs of the serpent were full of poison. Then the serpent bit him and *Tawkxwax* became very ill. Since then serpents have been dangerous.

23. Origin of the Sting-ray (Pedro)

One day as *Tawkxwax* was walking by the side of a lagoon he found a piece of leather. He picked it up, looked at it and threw it into the water. Shortly afterwards he decided he wanted the piece of leather but could not find it. He put his hands in the water to feel for it and was stung. He saw that he had been stung by a sting-ray and realized that the piece of leather had changed into a sting-ray.

24. Why the Mistol Trees Walk No More (Pedro)

X 539 X 773

In days gone by mistol[1] trees could walk. They could be driven along by people shouting or making a noise to frighten them. They would hop and fly just like grass-

[8247]

[1] Mistol (*Zizyphus Mistol*) is very useful to the Matako. They eat its fruits and with its ashes they make alkali which they chew together with coca leaves.

A pregnant woman must avoid sexual intercourse if she does not want to incur disgrace by having twins.

To avoid accidents and to facilitate delivery, pregnant women use certain medicines, especially the *litsitáx* root which they toast and pound into a powder in a mortar. They never wear belts or stretch themselves lest the child take a wrong position. The woman brings the child to birth in a squatting posture, she holds on to a stick at this time. Her husband and an old woman give her any assistance she may need. The afterbirth is buried and the navel is cauterized with the burning stem of a gourd. At the birth, the father picks up the child and it bears his likeness, but if ist is picked up by someone else the child will resemble that person. When twins are born, which seems to occur very seldom, one is taken by the mother of the woman and is brought up as her own child.

Woman cause abortion by using a certain plant (*nLǫt*) which looks like manioc. The root is ground and taken with water. The sterilizing effect of this drug may last for two, four, or eight years.

c) *Names*

The name is given by the father when the child is from one to three years old. The father may dream of an animal, an object, a sentence or a word pronounced by one of the charcters in his dream, and this becomes the name of the child. A name is often distorted, a fact which explains their queer form. For instance *čalax* »black woman» has become *načalax* and *apan-toi* »bread», *hap?ap*.

d) *Marriage*

The suiter may get the approval of his future father-in-law by giving him money or cattle, but very often the authorization of the girl's father is far less essential than that of the mother. If she opposes the marriage there is absolutely nothing that can be done. It may happen that the father

3: Metraux E-5 (1933) 1939 SI7 Mataco SI7

of their dreams. My informant, having dreamed that he was planting sugar-cane, intended to grow some.

Through the soul one knows what is going to happen. For instance, if one dreams that he shall be killed, it is likely that he is to die an unnatural death. If he is traveling about and dreams of home it is better to turn back. A man who is away from his wife can talk to her in the evening and she will see him in her dreams. It is the soul which walks about during the night. If one dreams of an algarroba or that he is working in a field, it means that he has still a long time to live. If during the absence of a member of the group someone dies, the absent one will dream about the dead person who appears to him naked. Generally when a traveler returns to his village there is no need to tell him of what has happened during his absence, for he is informed of everything through his dreams which occur when his soul returns to his family. Very often in dreams one sees dead relatives. The soul has gone to the underworld and paid them a visit. Sometimes the dead return by night to the houses of the living who then dream of the departed.

b) *Remedies*

The Indians call a certain fungus *ăxǫ̆lĕut*. According to them it is the excrement of the fox which towards morning transforms itself into a fungus. It is used as a remedy for scalding. A fragment of the plant is toasted, powdered, mixed with fat and the white of an egg and spread on the burned place. The fat and the egg white are desirable but not indispensable ingredients for in a pinch the toasted powder is sufficient. This same plant sometimes obturates the penis of a sick person and prevents him from urinating. If when sucking the sick man the medicine-man gets out a fragment of this plant it most certainly means that the patient will recover. When the extremity of a limb aches it is to be tied at intervals of about half an

776 The Indians will willingly speak about the lewo, mythical animals which live in the lakes and which look like serpents. Their [821] breath forms the rainbow (lewo-tutsax, which means lewo breath). [841] The lewo have a horror of women during the period of menstruation and if any woman should approach a pool or river in that state, the lewo will call up a tempest.

The Witch Doctors

756 The witch doctors get their power from the spirits, who teach them the magic dances. The soul of a witch doctor can be snatched away by a wilan or spirit and shut up in a tree. The spirit teaches him the language of the spirits and when his education is complete the spirit blows upon the novice and confers upon him the power of caring for the sick by the same means, that is, by blowing upon them. The meetings between spirits and witch doctors are very frequent, and take place at night.

In order to take the soul out of the body and send it on a supernatural mission, the witch doctors inhale up their noses a powder made [278] with roasted grains of sebil (Piptadenia sp.) to which they sometimes [824] add powdered tobacco. These inhalations cause them to become dazed [16] and then it is that the witch doctor's soul abandons his body and turns into an insect or a bird--usually the yulo--and goes off to alight on a tree which stands in the middle of a lake. This tree is perpetually shaking and it is extremely difficult to stay on it. A grave misfortune overtakes those who fall for they are immediately devoured by the palometas ["piranas" - a laterally flattened, ferocious, small fish - Translator] and crocodiles which swam in the lake. If the witch doctors are expert in their art they change themselves into lizards and so manage to stay on the tree. It is supposed that each witch doctor owns a branch of that tree which is closely allied with his destiny. While the leaves remain green the witch doctor enjoys good health and is in no danger but as soon as the branch starts to wither then his troubles begin.

[821] The witch doctors can predict good and bad weather for a long time in advance, for on their journeyings they see the green and dry leaves corresponding to the good and bad seasons of the year.

6:Métraux E-5 (no date) 1943 SI7 Mataco SI7

000 estos indios que están acosados por una situación económica de día en día más difícil y que fuera de las misiones están sometidos a múltiples vejámenes y humillaciones. No obstante no se han observado crisis de suicidio entre los demás indios del Chaco argentino que viven bajo condiciones igualmente desfavorables. Hay también indicios de que los casos de suicidio eran comunes al principio de la era de las misiones y esto puede hacernos suponer que el suicidio era la expresión tradicional de la agresión en contra de los miembros de su grupo contra los cuales el individuo no podía vengarse en otra forma. El ejemplo dado por un suicida se hace contagioso y de allí nacen epidemias esporádicas de envenenamiento.

768 The high rate of suicide among the Matako Indians of the Argentine Gran Chaco is a social phenomenon well worth our attention. In this tribe suicide at times assumes the character of an epidemic that causes havoc among the people and is a serious problem for the [197] English missionaries who have several stations along the Bermejo and Pilcomayo Rivers. To these missionaries, especially to Dr. Collins [115] Smith and J. White, I am indebted for most of my information on the suicidal mania that has flared up on several occasions during the past ten years. Personally, I have witnessed only one case. Information about suicide among the Matako who live in the bush or as miserable hilotes around the white settlements is not available, but there is little doubt that if the Matako in the missions are so prone to take their lives, those who find themselves exposed to hunger and mistreatment will be even more inclined to end their days wilfully.

Suicide among the Matako takes a strictly patternized form. In all cases known to me, the victims poisoned themselves by eating the [824] fruits of the sachasandia (Capparis salicifolia Griseb). This fruit, the size of a walnut, grows on a tree which is very common in the Chaco region between the Bermejo and Pilcomayo Rivers. It ripens in December, the period which coincides with the largest number of 262 suicides. Strangely enough, the sachasandia is also an important food for the chaco Indians; it is collected in the summer, dried in 251 the sun and stored in caraguata bags to be consumed during the lean winter months. Even dried these fruits are extremely poisonous and 252 before eating them the Indians boil them six or seven times in different waters.

762 The clinical symptoms of sachasandia poisoning are: convulsions, 164 foaming at the mouth and, finally, coma. The heart beat becomes jerky with short stops and upsurges of activity. The muscles of the throat are affected with paralysis and the patient makes a gurgling sound. When paralysis sets in, no emitic can be taken orally. The last phase of the agony is characterized by jumpy motions of the body

Ee 838 171 c Ce [113]

/224 cont./

According to Westermarck (2), homosexuality is very

2. Westermarck: Ursprung und Entwickelung der Moralbegriffe /Origin and Development of Ideas of Morality/. Vol. II. Leipzig, 1909.

widespread among the Indians of America. The conception that this is a disgrace is by no means as marked everywhere as it is among the Indians mentioned here.

Ee Ce 839 171 c Ce 833 171 [839]

/225/ Among the Chané and Chiriguano I did not hear anything about onanism. Among the Choroti, on the other hand, it is said to be practiced by the men who are ignored by the women at a dance.

Perversions in the relationship between men and women, which were common in ancient Peru, do not seem to occur here. The primitive mammal position in coitus is said to be common among the Chaco tribes.

M 832 ●824 Ee 825 773 839

Mataco gave me a root which they used as an aphrodisiac.

The relationship between human beings and animals is so intimately intertwined in the legends of the Indians that one cannot always determine whether they mean the one or the other. The legends that describe love affairs between human beings and animals are not descriptions of bestiality, which seems to be unknown among these Indians.

Ee 834 171

The sense of modesty has developed very differently among these peoples. It seems to me to depend very much on the mode of dress. None of these Indian men or women of whom I have spoken here regards it as improper, insofar as they have not been completely corrupted or civilized, to expose the upper part of the body. The Chiriguano and Chané women are much more ashamed than the Choroti and Ashluslay when they expose the sexual parts. The latter were very reluctant to undress completely in order to be photographed. I did not even dare propose such a thing to the former.

Ee [126]